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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,859	08/04/2003	Steve D. Riedel	O432003	5633
7590	04/20/2005		EXAMINER	
Steve D. Riedel 9299 Talus Circle Eden Prairie, MN 55347			GREENE, JASON M	
			ART UNIT	PAPER NUMBER
			1724	
DATE MAILED: 04/20/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,859

Applicant(s)

RIEDEL ET AL.

Examiner

Jason M. Greene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 and 9-13 is/are allowed.
- 6) ☒ Claim(s) 15 is/are rejected.
- 7) ☒ Claim(s) 8, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Oath/Declaration

1. A new oath or declaration is required because:

Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c). Specifically, the Zip code of the mailing address for inventor Steve Zellinger has been changed from 53077 to 55077.

The wording of an oath or declaration cannot be amended. If the wording is not correct or if all of the required affirmations have not been made or if it has not been properly subscribed to, a new oath or declaration is required. The new oath or declaration must properly identify the application of which it is to form a part, preferably by application number and filing date in the body of the oath or declaration. See MPEP §§ 602.01 and 602.02.

Drawings

2. The drawings are objected to under 37 CFR 1.84(u)(2) because the view numbers (e.g. "Fig. 1", "Fig. 2", etc.) are not larger than the numbers used for reference characters. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims

3. With regard to claim 1, the Examiner suggests Applicants change the period (.) at the end of line 17 to a semicolon (;), rewrite the word "Said" at the beginning of line 19 as "said" and insert a period (.) at the end of line 21 to correct minor grammatical informalities. The Examiner also suggests Applicants rewrite the phrase "the cartridge body shell" in line 8 as "the cartridge body" to clarify antecedent basis. Additionally, the word "containing" at the end of line 15 should be changed to "contains" to improve the readability of the claim language. Furthermore, the Examiner suggests changing the phrase "said filter paper" in line 11 to read as "filter" to clarify antecedent basis and improve the readability of the claim language.

4. With regard to claim 2, the Examiner suggests Applicants delete the word "outside" at the end of line 1 to clarify antecedent basis and improve readability of the claim language.

5. With regard to claim 3, the Examiner suggests Applicants delete the word "an" in line 2 to improve the readability of the claim language.

6. With regard to claim 4, the Examiner suggests Applicants rewrite the word "wheretwo" as "where two" to correct an apparent typographical error.

7. Claims 6 and 7 recite the inlet and outlet having a dimension within a specified range. However, the claims fail to recite what dimension is covered by the range. In page 4, lines 13-15 of the specification, Applicants disclose the inlet and outlet having inside diameters corresponding to the recited ranges. Accordingly, for examination purposes, the Examiner has assumed that the recited ranges are intended to define the inside diameter of the inlet and outlet. If this assumption is correct, the Examiner suggests Applicants insert the phrase "an inside diameter of" between the words "wherein" and "said" in line 1 of claims 6 and 7 to improve the clarity and precision of the claim language.

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8. With regard to claim 13, the Examiner suggests Applicants rewrite the phrase “the cartridge body shell” in line 7 as “the cartridge body” to clarify antecedent basis. The Examiner also suggests Applicants delete the word “is” in line 18 and the words “are” in lines 25 and 29 to improve the readability of the claim language. Furthermore, the words “Said” at the beginning of lines 18, 22, 25 and 29 should be changed to “said” to correct minor grammatical informalities. Additionally, the word “containing” at the end of line 15 should be changed to “contains” to improve the readability of the claim language. Furthermore, the Examiner suggests changing the phrase “said filter paper” in line 11 to read as “filter” to clarify antecedent basis and improve the readability of the claim language.

9. With regard to claim 15, the Examiner suggests Applicants insert a period (.) at the end of the claim to correct a minor grammatical informality.

Claim Objections

10. Claims 8, 14 and 15 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 8 recites the filter cartridge of claim 1 wherein the filter media contains at least one layer of filter media. However, since claim 1 recites the filter being a single ply

or multi layered filter, claim 1 already requires the filter media to contain at least one layer of filter media. Therefore, claim 8 fails to further limit parent claim 1.

Claims 14 and 15 recite the filter cartridge of claim 13 wherein the filter cartridge has a functional fit within vacuum cleaners manufactured by at least 3 different manufactures. However, such a recitation is merely functional language which fails to positively recite additional structural limitations. Therefore, since claims 14 and 15 do not impose additional structural limitations on the filter cartridge of claim 13, they fail to further limit the claim.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the manufactures being selected from the group of 3 manufactures. However, for each manufacturer a number of different models are also listed. Therefore, it is not clear if the filter cartridge is intended to have a functional fit with any of the vacuum cleaning machines produced by the recited manufactures or with only the specific models listed. For examination purposes, the Examiner has

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assumed the functional fit is intended to exist with only the specific models recited in claim 15. If this assumption is correct, the Examiner suggests Applicants change the word "manufactures" at the beginning of line 2 to "vacuum cleaning machines" to clarify that the claim covers only the recited models. The Examiner additionally notes that claim 15 can alternatively be amended to delete the recitation of the specific models.

Allowable Subject Matter

13. Claim 1-7 and 9-13 are allowed.

14. Claims 8, 14 and 15 would be allowable if rewritten or amended to overcome the objections set forth in this Office action.

15. Claim 15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

16. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claims 1-12, Jaynes discloses a filter cartridge (10) for a vehicle engine comprising a cartridge body (14) having an inlet (58) and an outlet (64), a first fan folded single ply or multi layered filter (44) for filtering air disposed therein between

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the inlet and outlet portions of the cartridge body, a pair of shells (16,18) forming the cartridge and holding the fan folded filter, said cartridge having a top cover shell (18) which receives the outlet aperture (64), said cartridge having a lower shell (16) which contains the inlet aperture (58), said top shell and said lower shell being generally rectangular in cross section with two adjacent large radius corners and two adjacent small radius corners in Figs. 2-4 and col. 3, line 16 to col. 4, line 33. Specifically, the lower shell (16) has two adjacent large radius corners formed on the upper portion of the shell and two adjacent small radius corners formed on the lower portion of the shell and the upper shell (18) has two adjacent large radius corners formed on the lower portion of the shell and two adjacent small radius corners formed on the upper portion of the shell. The Examiner notes that the limitation "with two adjacent large radius corners and two adjacent small radius corners" in lines 17-18 has been interpreted to mean that each of the top and lower shells have two pairs of adjacent corners, wherein each corner is rounded such that a radius of curvature of two adjacent corners is greater than the radius of curvature of the other pair of corners.

The prior art made of record does not teach or fairly suggest the filter cartridge of claim 1 wherein the filter cartridge is a vacuum cleaner filter cartridge for a vacuum cleaning machine, the top shell receiving the inlet aperture, the lower shell containing the outlet aperture or the top shell and lower shell being generally square in cross section.

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With regard to claims 13-15, Jaynes discloses a filter cartridge (10) for a vehicle engine comprising a cartridge body (14) having an inlet (58) and an outlet (64), a first fan folded single ply or multi layered filter (44) for filtering air disposed therein between the inlet and outlet portions of the cartridge body, a pair of shells (16,18) forming the cartridge and holding the fan folded filter, said cartridge having a top cover shell (18) which receives the outlet aperture (64), said cartridge having a lower shell (16) which contains the inlet aperture (58), said cartridge having two adjacent longitudinal radii (formed by two adjacent corners on the upper portion of the lower shell) having a radius greater than the radius of two adjacent longitudinal radii (formed by two adjacent corners on the lower portion of the lower shell) in Figs. 2-4 and col. 3, line 16 to col. 4, line 33. The Examiner notes that the limitation "said cartridge having two adjacent, longitudinal radii" in lines 25 and 29 has been interpreted to mean that cartridge comprises a pair of adjacent areas having a radius of curvature within the recited ranges.

The prior art made of record does not teach or fairly suggest the filter cartridge of claim 13 wherein the filter cartridge is a vacuum cleaner filter cartridge for a vacuum cleaning machine, the top shell receiving the inlet aperture, the lower shell containing the outlet aperture, the cartridge having the recited outside length and width dimensions, or the cartridge having a pair of adjacent portions having radii within the recited ranges.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Stephens et al., Howie, Allgeier, Spearman, Yamamoto et al., Witchell, Natale, Greenleaf, Sr., Müller, Avery and Hwang references disclose similar filter cartridges.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Greene whose telephone number is (571) 272-1157. The examiner can normally be reached on Monday - Friday (9:00 AM to 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Jason M. Greene

Examiner

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Jason M. Greene
4/15/05

jmg

April 15, 2005